

SEQUENCE LISTING

<110> Abdel-Meguid, Sherin S.
 Babine, Robert E.
 Deng, Hongfeng
 Jin, Lei
 Lin, Jian
 Magee, Scott R.
 Meyers, Harold V.
 Pandey, Pramod
 Rynkiewicz, Michael J.
 Weaver, David T.

<120> COMPOUNDS AND METHODS FOR TREATMENT OF
 THROMBOSIS

<130> 50201/003002

<150> 60/459,910

<151> 2003-04-02

<160> 8

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 625

<212> PRT

<213> Homo sapiens

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Ser	Gly	Glu	Cys	Val	Thr	Gln	Leu	Leu	Lys	Asp	Thr	Cys	Phe	Glu	Gly	20	25	30	
Gly	Asp	Ile	Thr	Thr	Val	Phe	Thr	Pro	Ser	Ala	Lys	Tyr	Cys	Gln	Val	35	40	45	
Val	Cys	Thr	Tyr	His	Pro	Arg	Cys	Leu	Leu	Phe	Thr	Phe	Thr	Ala	Glu	50	55	60	
Ser	Pro	Ser	Glu	Asp	Pro	Thr	Arg	Trp	Phe	Thr	Cys	Val	Leu	Lys	Asp	65	70	75	80
Ser	Val	Thr	Glu	Thr	Leu	Pro	Arg	Val	Asn	Arg	Thr	Ala	Ala	Ile	Ser	85	90	95	
Gly	Tyr	Ser	Phe	Lys	Gln	Cys	Ser	His	Gln	Ile	Ser	Ala	Cys	Asn	Lys	100	105	110	
Asp	Ile	Tyr	Val	Asp	Leu	Asp	Met	Lys	Gly	Ile	Asn	Tyr	Asn	Ser	Ser	115	120	125	
Val	Ala	Lys	Ser	Ala	Gln	Glu	Cys	Gln	Glu	Arg	Cys	Thr	Asp	Asp	Val	130	135	140	
His	Cys	His	Phe	Phe	Thr	Tyr	Ala	Thr	Arg	Gln	Phe	Pro	Ser	Leu	Glu	145	150	155	160
His	Arg	Asn	Ile	Cys	Leu	Leu	Lys	His	Thr	Gln	Thr	Gly	Thr	Pro	Thr	165	170	175	
Arg	Ile	Thr	Lys	Leu	Asp	Lys	Val	Val	Ser	Gly	Phe	Ser	Leu	Lys	Ser	180	185	190	
Cys	Ala	Leu	Ser	Asn	Leu	Ala	Cys	Ile	Arg	Asp	Ile	Phe	Pro	Asn	Thr	195	200	205	

Val	Phe	Ala	Asp	Ser	Asn	Ile	Asp	Ser	Val	Met	Ala	Pro	Asp	Ala	Phe
210						215				220					
Val	Cys	Gly	Arg	Ile	Cys	Thr	His	His	Pro	Gly	Cys	Leu	Phe	Phe	Thr
225					230					235					240
Phe	Phe	Ser	Gln	Glu	Trp	Pro	Lys	Glu	Ser	Gln	Arg	Asn	Leu	Cys	Leu
			245					250					255		
Leu	Lys	Thr	Ser	Glu	Ser	Gly	Leu	Pro	Ser	Thr	Arg	Ile	Lys	Lys	Ser
		260						265					270		
Lys	Ala	Leu	Ser	Gly	Phe	Ser	Leu	Gln	Ser	Cys	Arg	His	Ser	Ile	Pro
	275						280					285			
Val	Phe	Cys	His	Ser	Ser	Phe	Tyr	His	Asp	Thr	Asp	Phe	Leu	Gly	Glu
290						295					300				
Glu	Leu	Asp	Ile	Val	Ala	Ala	Lys	Ser	His	Glu	Ala	Cys	Gln	Lys	Leu
305				310						315					320
Cys	Thr	Asn	Ala	Val	Arg	Cys	Gln	Phe	Phe	Thr	Tyr	Thr	Pro	Ala	Gln
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Ala	Ser	Cys	Asn	Glu	Gly	Lys	Gly	Lys	Cys	Tyr	Leu	Lys	Leu	Ser	Ser
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Asn	Gly	Ser	Pro	Thr	Lys	Ile	Leu	His	Gly	Arg	Gly	Gly	Ile	Ser	Gly
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Tyr	Thr	Leu	Arg	Leu	Cys	Lys	Met	Asp	Asn	Glu	Cys	Thr	Thr	Lys	Ile
370					375					380					
Lys	Pro	Arg	Ile	Val	Gly	Gly	Thr	Ala	Ser	Val	Arg	Gly	Glu	Trp	Pro
385				390						395					400
Trp	Gln	Val	Thr	Leu	His	Thr	Thr	Ser	Pro	Thr	Gln	Arg	His	Leu	Cys
			405					410						415	
Gly	Gly	Ser	Ile	Ile	Gly	Asn	Gln	Trp	Ile	Leu	Thr	Ala	Ala	His	Cys
		420						425					430		
Phe	Tyr	Gly	Val	Glu	Ser	Pro	Lys	Ile	Leu	Arg	Val	Tyr	Ser	Gly	Ile
	435						440					445			
Leu	Asn	Gln	Ser	Glu	Ile	Lys	Glu	Asp	Thr	Ser	Phe	Phe	Gly	Val	Gln
450					455						460				
Glu	Ile	Ile	Ile	His	Asp	Gln	Tyr	Lys	Met	Ala	Glu	Ser	Gly	Tyr	Asp
465				470						475					480
Ile	Ala	Leu	Leu	Lys	Leu	Glu	Thr	Thr	Val	Asn	Tyr	Thr	Asp	Ser	Gln
			485					490						495	
Arg	Pro	Ile	Cys	Leu	Pro	Ser	Lys	Gly	Asp	Arg	Asn	Val	Ile	Tyr	Thr
		500						505					510		
Asp	Cys	Trp	Val	Thr	Gly	Trp	Gly	Tyr	Arg	Lys	Leu	Arg	Asp	Lys	Ile
	515						520						525		
Gln	Asn	Thr	Leu	Gln	Lys	Ala	Lys	Ile	Pro	Leu	Val	Thr	Asn	Glu	Glu
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Cys	Gln	Lys	Arg	Tyr	Arg	Gly	His	Lys	Ile	Thr	His	Lys	Met	Ile	Cys
545					550					555					560
Ala	Gly	Tyr	Arg	Glu	Gly	Gly	Lys	Asp	Ala	Cys	Lys	Gly	Asp	Ser	Gly
			565					570						575	
Gly	Pro	Leu	Ser	Cys	Lys	His	Asn	Glu	Val	Trp	His	Leu	Val	Gly	Ile
		580						585					590		
Thr	Ser	Trp	Gly	Glu	Gly	Cys	Ala	Gln	Arg	Glu	Arg	Pro	Gly	Val	Tyr
	595					600						605			
Thr	Asn	Val	Val	Glu	Tyr	Val	Asp	Trp	Ile	Leu	Glu	Lys	Thr	Gln	Ala
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Val															
625															

<210> 2
<211> 624

<212> PRT

<213> Oryctolagus cuniculus

<400> 2

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Gly	Asp	Ile	Thr	Thr	Val	Tyr	Thr	Pro	Asn	Ala	Lys	His	Cys	Gln	Val
	35						40					45			
Val	Cys	Thr	Tyr	His	Pro	Arg	Cys	Leu	Leu	Phe	Thr	Phe	Met	Ala	Glu
	50					55					60				
Ser	Ser	Val	Asp	Ser	Thr	Lys	Trp	Phe	Ser	Cys	Ile	Leu	Lys	Asp	Ser
65					70					75					80
Val	Thr	Glu	Ser	Leu	Pro	Lys	Val	Asn	Met	Thr	Gly	Ala	Ile	Ser	Gly
			85					90						95	
Tyr	Ser	Phe	Lys	Gln	Cys	Pro	His	Gln	Leu	Ser	Ala	Cys	Asn	Lys	Asp
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Ile	Tyr	Val	Asp	Leu	Asp	Met	Gln	Gly	Met	Asn	Tyr	Asn	Gly	Ser	Val
	115						120					125			
Thr	Lys	Asn	Ala	Gln	Glu	Cys	Gln	Glu	Arg	Cys	Thr	Asn	Asp	Ala	His
	130					135					140				
Cys	His	Phe	Phe	Thr	Tyr	Ala	Thr	Arg	Gln	Phe	Pro	Ser	Ala	Glu	His
145					150					155					160
Arg	Asn	Ile	Cys	Leu	Leu	Lys	Tyr	Thr	Gln	Thr	Gly	Ala	Pro	Thr	Gly
			165					170						175	
Ile	Arg	Lys	Leu	Lys	Lys	Val	Val	Ser	Gly	Phe	Ser	Leu	Lys	Ser	Cys
			180					185					190		
Ala	Leu	Ser	Asn	Leu	Ala	Cys	Ile	Arg	Asp	Ile	Phe	Pro	Ser	Thr	Val
	195						200					205			
Phe	Ala	Asp	Asn	Asn	Ile	Asp	Ser	Val	Val	Ala	Pro	Asp	Ala	Leu	Val
	210					215					220				
Cys	Arg	Arg	Ile	Cys	Thr	His	His	Pro	Asn	Cys	Leu	Phe	Phe	Thr	Phe
225					230					235					240
Phe	Ser	Gln	Glu	Trp	Pro	Lys	Glu	Ser	His	Arg	Asn	Leu	Cys	Leu	Leu
			245						250					255	
Lys	Thr	Ser	Glu	Ser	Gly	Leu	Pro	Ser	Thr	Arg	Ile	His	Lys	Asn	Gln
		260						265					270		
Ala	Leu	Ser	Gly	Phe	Ser	Leu	Gln	Asn	Cys	Arg	His	Ser	Ile	Pro	Val
	275						280					285			
Phe	Cys	His	Ser	Ser	Phe	Tyr	Thr	Asp	Thr	Asp	Phe	Leu	Gly	Glu	Glu
	290					295				300					
Leu	Asp	Ile	Val	Asp	Val	Lys	Gly	His	Glu	Ala	Cys	Gln	Lys	Met	Cys
305					310					315					320
Thr	Ser	Ala	Ile	Arg	Cys	Gln	Phe	Phe	Thr	Tyr	Ser	Ser	Ser	Gln	Glu
			325						330					335	
Ser	His	Asn	Lys	Gly	Lys	Gly	Thr	Cys	Tyr	Leu	Lys	Leu	Ser	Ser	Asn
		340						345					350		
Gly	Ser	Pro	Thr	Lys	Ile	Leu	His	Gly	Arg	Gly	Gly	Ile	Ser	Gly	Tyr
	355					360						365			
Thr	Leu	Arg	Leu	Cys	Lys	Met	Asp	Asn	Val	Cys	Thr	Thr	Lys	Ile	Lys
	370					375					380				
Pro	Arg	Ile	Val	Gly	Gly	Ser	Ala	Ser	Leu	Pro	Gly	Glu	Trp	Pro	Trp
385					390					395					400
Gln	Val	Thr	Leu	His	Thr	Val	Ser	Pro	Thr	Gln	Arg	His	Leu	Cys	Gly
			405						410					415	
Gly	Ser	Ile	Ile	Gly	Asn	Gln	Trp	Ile	Leu	Thr	Ala	Ala	His	Cys	Phe
			420					425					430		

Tyr	Gly	Ile	Glu	Ser	Pro	Lys	Ile	Leu	Arg	Val	Tyr	Gly	Gly	Ile	Leu
		435					440					445			
Asn	Gln	Ser	Glu	Ile	Lys	Glu	Asp	Thr	Ala	Phe	Phe	Gly	Val	Gln	Glu
	450					455					460				
Ile	Ile	Ile	His	Asp	Gln	Tyr	Lys	Thr	Ala	Glu	Ser	Gly	Tyr	Asp	Ile
465					470					475					480
Ala	Leu	Leu	Lys	Leu	Glu	Thr	Thr	Met	Asn	Tyr	Thr	Asp	Ser	Gln	Arg
			485						490					495	
Pro	Ile	Cys	Leu	Pro	Ser	Lys	Gly	Asp	Arg	Asn	Val	Ile	Tyr	Thr	Asp
		500						505				510			
Cys	Trp	Val	Thr	Gly	Trp	Gly	Tyr	Arg	Lys	Leu	Arg	Asp	Lys	Ile	Gln
	515						520					525			
Asn	Thr	Leu	Gln	Lys	Ala	Lys	Ile	Pro	Leu	Leu	Ser	Asn	Glu	Glu	Cys
	530					535					540				
Gln	Lys	Arg	Tyr	Gln	Arg	His	Glu	Ile	Thr	Ser	Gly	Met	Ile	Cys	Ala
545					550					555					560
Gly	Tyr	Lys	Glu	Gly	Gly	Lys	Asp	Ala	Cys	Lys	Gly	Asp	Ser	Gly	Gly
			565					570						575	
Pro	Leu	Ser	Cys	Lys	His	Asn	Glu	Val	Trp	His	Leu	Val	Gly	Ile	Thr
		580						585				590			
Ser	Trp	Gly	Glu	Gly	Cys	Ala	Gln	Arg	Glu	Arg	Pro	Gly	Ile	Tyr	Thr
	595						600					605			
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		20						25					30		
Gly	Asp	Leu	Ser	Thr	Val	Phe	Thr	Pro	Ser	Ala	Thr	Tyr	Cys	Arg	Leu
	35						40					45			
Val	Cys	Thr	His	His	Pro	Arg	Cys	Leu	Leu	Phe	Thr	Phe	Met	Ala	Glu
	50					55					60				
Ser	Ser	Ser	Asp	Asp	Pro	Thr	Lys	Trp	Phe	Ala	Cys	Ile	Leu	Lys	Asp
65					70					75					80
Ser	Val	Thr	Glu	Ile	Leu	Pro	Met	Val	Asn	Met	Thr	Gly	Ala	Ile	Ser
			85						90					95	
Gly	Tyr	Ser	Phe	Lys	Gln	Cys	Pro	Gln	Gln	Leu	Ser	Thr	Cys	Ser	Lys
			100					105					110		
Asp	Glu	Tyr	Val	Asn	Leu	Asp	Met	Lys	Gly	Met	Asn	Tyr	Asn	Ser	Ser
	115						120					125			
Val	Val	Lys	Asn	Ala	Arg	Glu	Cys	Gln	Glu	Arg	Cys	Thr	Asp	Asp	Ala
	130					135						140			
His	Cys	Gln	Phe	Phe	Thr	Tyr	Ala	Thr	Gly	Tyr	Phe	Pro	Ser	Val	Asp
145					150					155					160
His	Arg	Lys	Met	Cys	Leu	Leu	Lys	Tyr	Thr	Arg	Thr	Gly	Thr	Pro	Thr
			165						170					175	
Thr	Ile	Thr	Lys	Leu	Asn	Gly	Val	Val	Ser	Gly	Phe	Ser	Leu	Lys	Ser
			180					185					190		
Cys	Gly	Leu	Ser	Asn	Leu	Ala	Cys	Ile	Arg	Asp	Ile	Phe	Pro	Asn	Thr
	195						200					205			

Val	Leu	Ala	Asp	Leu	Asn	Ile	Asp	Ser	Val	Val	Ala	Pro	Asp	Ala	Phe
210						215					220				
Val	Cys	Arg	Arg	Ile	Cys	Thr	His	His	Pro	Thr	Cys	Leu	Phe	Phe	Thr
225					230					235					240
Phe	Phe	Ser	Gln	Ala	Trp	Pro	Lys	Glu	Ser	Gln	Arg	His	Leu	Cys	Leu
				245					250					255	
Leu	Lys	Thr	Ser	Glu	Ser	Gly	Leu	Pro	Ser	Thr	Arg	Ile	Thr	Lys	Ile
			260					265					270		
His	Ala	Leu	Ser	Gly	Phe	Ser	Leu	Gln	His	Cys	Arg	His	Ser	Val	Pro
		275					280				285				
Val	Phe	Cys	His	Pro	Ser	Phe	Tyr	Asn	Asp	Thr	Asp	Phe	Leu	Gly	Glu
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Glu	Leu	Asp	Ile	Val	Asp	Val	Lys	Gly	Gln	Glu	Thr	Cys	Gln	Lys	Thr
305					310					315					320
Cys	Thr	Asn	Asn	Ala	Arg	Cys	Gln	Phe	Phe	Thr	Tyr	Tyr	Pro	Ser	His
				325					330					335	
Arg	Leu	Cys	Asn	Glu	Arg	Asn	Arg	Arg	Gly	Arg	Cys	Tyr	Leu	Lys	Leu
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Ser	Ser	Asn	Gly	Ser	Pro	Thr	Arg	Ile	Leu	His	Gly	Arg	Gly	Gly	Leu
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Ser	Gly	Tyr	Ser	Leu	Arg	Leu	Cys	Lys	Met	Asp	Asn	Val	Cys	Thr	Thr
370						375					380				
Lys	Ile	Asn	Pro	Arg	Val	Val	Gly	Gly	Ala	Ala	Ser	Val	His	Gly	Glu
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Trp	Pro	Trp	Gln	Val	Thr	Leu	His	Ile	Ser	Gln	Gly	His	Leu	Cys	Gly
			405						410					415	
Gly	Ser	Ile	Ile	Gly	Asn	Gln	Trp	Ile	Leu	Thr	Ala	Ala	His	Cys	Phe
			420					425					430		
Ser	Gly	Ile	Glu	Thr	Pro	Lys	Lys	Leu	Arg	Val	Tyr	Gly	Gly	Ile	Val
		435					440					445			
Asn	Gln	Ser	Glu	Ile	Asn	Glu	Gly	Thr	Ala	Phe	Phe	Arg	Glu	Gln	Glu
450						455					460				
Met	Ile	Ile	His	Asp	Gln	Tyr	Thr	Thr	Ala	Glu	Ser	Gly	Tyr	Asp	Ile
465				470						475					480
Ala	Leu	Leu	Lys	Leu	Glu	Ser	Ala	Met	Asn	Tyr	Thr	Asp	Phe	Gln	Arg
			485					490						495	
Pro	Ile	Cys	Leu	Pro	Ser	Lys	Gly	Asp	Arg	Asn	Ala	Val	His	Thr	Glu
		500						505					510		
Cys	Trp	Val	Thr	Gly	Trp	Gly	Tyr	Thr	Ala	Leu	Arg	Gly	Glu	Val	Gln
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Ser	Thr	Leu	Gln	Lys	Ala	Lys	Val	Pro	Leu	Val	Ser	Asn	Glu	Glu	Cys
		530				535					540				
Gln	Thr	Arg	Tyr	Arg	Arg	His	Lys	Ile	Thr	Asn	Lys	Met	Ile	Cys	Ala
545					550					555					560
Gly	Tyr	Lys	Glu	Gly	Gly	Lys	Asp	Thr	Cys	Lys	Gly	Asp	Ser	Gly	Gly
			565					570						575	
Pro	Leu	Ser	Cys	Lys	Tyr	Asn	Gly	Val	Trp	His	Leu	Val	Gly	Ile	Thr
		580						585					590		
Ser	Trp	Gly	Glu	Gly	Cys	Gly	Gln	Lys	Glu	Arg	Pro	Gly	Val	Tyr	Thr
		595					600					605			
Asn	Val	Ala	Lys	Tyr	Val	Asp	Trp	Ile	Leu	Glu	Lys	Thr	Gln	Thr	Val
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<211> 708

<212> DNA

<213> Rattus Norvegicus

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cattgtttct ctgggacaga gacacctaaa actctgcgtg tctacggtgg tattgtaaat 180
caatcagaaa taaatgaaga taccactttc ttcagggttc aagaaatgat aattcatgat 240
caatatacat cggcagaaag tgggtttgac attgccctct taaaactgga accggccatg 300
aattacacag attttcagcg gccaatatgc ctgccttcca aaggagacag aaacgtagtt 360
cacacagaat gctgggtgac tggatgggga tacacaaaat caagagatga agtacaaagt 420
actctccaga aagccaaggt accattggtg tcgaatgaag aatgtcaaac aagatacaga 480
aaacataaaa taaccaacaa ggtgatctgt gcaggatata aggaaggagg gaaggatacg 540
tgtaagggag attctggagg gccctgtcc tgcaaacaca atgggggtctg gcacttggtg 600
ggcatcacia gctggggtga aggcctgcggc cagaaagaga ggccgggtgt ctacaccaac 660
gtggccaagt atgtggactg gatcttgag aaaactcagt cggaatga 708

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<212> DNA
<213> Rattus Norvegicus

<400> 5
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<210> 6
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<210> 7
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<400> 7
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<210> 8
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<213> Rattus Norvegicus

<400> 8
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